

REMARKS

Favorable reconsideration of this application in light of the following discussion is respectfully requested.

Claims 1, 5-6, 8-10, and 29-34 are presently active in this case. Claims 2-4, 7, and 11-28 were cancelled by previous amendments. The present Amendment amends Claims 1, 6, and 30 without introducing any new matter.

In the April 1, 2010 Office Action, Claims 1, 5, and 30 have been objected to; and Claims 1, 5-6, 8-10 and 29-34 were rejected under 35 U.S.C. § 103(a) as unpatentable over Zhang (U.S. Patent No. 6,810,259) in view of Nakabayashi et al. (U.S. Patent Publication No. 2003/0112810, hereinafter “Nakabayashi”).

In response to the objection to the claims, Applicants herewith amend Claims 1 and 30 as suggested in the pending Office Action. (See Office Action, from p. 4, l. 13, to p. 5, l. - 9.) In particular, Claim 1 is amended to recite “and transmit the packet to the next hop” to correct this minor informality. No new matter has been added. Moreover, dependent Claim 30 is amended to recite “wherein the packet transmission unit of a corresponding wireless base station is further configured to transmit a message packet reporting participation of a new terminal device when the new terminal device belongs to ~~this~~ the corresponding wireless base station wireless base station,” to address any issues on antecedent basis. However, it appears that dependent Claim 5 is in order, and does not have any informalities that could be addressed. If the Examiner disagrees, Applicants respectfully request the Examiner to point out to the particular deficiencies of dependent Claim 5.

Moreover, Applicants’ independent Claims 1 and 6 are amended to clarify how the next hop is determined. These features find non-limiting support in Applicants’ disclosure as originally filed, for example in Figures 21a-22b, and in the specification from page 45, line 11, to page 46, line 5. No new matter has been added.

In response to the rejection of Applicants' independent Claim 1 under 35 U.S.C. § 103(a), in light of the amendments to the claims, Applicants traverse the rejection, and request reconsideration thereof, as next discussed.

Briefly summarizing, Applicants' independent Claim 1 is directed to a packet transmission system. The system includes a plurality of wireless base stations; and one or more terminal devices belonging to one of the wireless base stations. Moreover, each of the wireless base stations has a location table to record an address of each of said plurality of wireless base stations that structure a network, in association with an address of the terminal device currently existing under said each wireless base station, a route control table describing each of the other wireless base stations as a root bridge or a destination bridge of a transmission path in the network in association with a next hop to which the received packet is to be forwarded, the next hop being determined in accordance with a wireless base station to which a source terminal device or a destination terminal device currently belongs, each of the wireless base stations is configured to exchange the information in the location table with the other wireless base stations to update the location table. In addition, each of the wireless base stations is configured to, upon receiving a packet, identify a wireless base station to which the source terminal device or the destination terminal device currently belongs according to the location table, based on a source address of the source terminal device or a destination address of the destination terminal device, respectively, included in the received packet to find the next hop according to the route control table, and transmit the packet to the next hop.

Turning now to the applied references, Zhang is directed to a location update protocol method used in mobile communications networks for managing subscriber profile information, that is associated with the subscribers of a network. (Zhang, Abstract.) In Zhang, when a base station 114 receives a registration message from a mobile host 120 and

an authentication procedure has been satisfied, the base station 114 updates the local profile subscriber list 150, by adding the profile associated with the new host to the local subscriber list. (Zhang, col. 31, ll. 26-30, Figs. 3-4, and 10A.)

However, Zhang fails to teach all the features of Applicants' independent Claim 1. In particular, Zhang fails to teach the following features:

a route control table describing each of the other wireless base stations as a root bridge or a destination bridge of a transmission path in the network in association with a next hop to which the received packet is to be forwarded, the next hop being determined in accordance with a wireless base station to which a source terminal device or a destination terminal device currently belongs

(Claim 1, portions omitted.) This is also confirmed by the pending Office Action. (Office Action, p. 8, l. 4.) Zhang merely updates the local profile subscriber list for the respective base station. Therefore, Zhang fails to teach all the features of Applicants' independent Claim 1.

The cited passages of Nakabayashi, used by the pending Office Action to form the 35 U.S.C. § 103(a) rejection, fails to remedy the deficiencies of Zhang, even if we assume that the combination is proper, as next discussed.

Nakabayashi is directed to a method of selecting a wireless bridge 10 from among a plurality of wireless bridges, each of these bridges having a communication quality at a predetermined level or higher. (Nakabayashi, Abstract, ¶¶ [0016]-[0017]). To select a wireless bridge, in Nakabayashi, a routing table 20, that is located inside the wireless bridge 10, can be used based on the reception level or a bridge priority value. (Nakabayashi, [0059] and [0073], see also Figs. 1 and 5) A wireless bridge with the lowest bridge priority value in the network is the root bridge. (Nakabayashi, ¶ [0044], ¶ [0059]). Also, Nakabayashi's routing table 20 contains the port number 21, the bridge ID 22, and the destination addresses 23, and the destination address field 23 contains broadcasting/multicasting addresses.

(Nakabayashi, ¶ [0051], Fig. 5). As shown in Nakabayashi's Figure 5, the routing table 20 can link a port number 21, a bridge ID 22 with a plurality of destination addresses 23 of input/output ports of the corresponding bridge. (Nakabayashi, ¶ [0050]).

However, Nakabayashi fails to teach the following features of Applicants' amended independent Claim 1:

a route control table describing each of the other wireless base stations as a root bridge or a destination bridge of a transmission path in the network in association with a next hop to which the received packet is to be forwarded, the next hop being determined in accordance with a wireless base station to which a source terminal device or a destination terminal device currently belongs

(Claim 1, portions omitted.) Nakabayashi does not have such route control table that describes "each of the other wireless base stations as a root bridge or a destination bridge of a transmission path in the network in association with a next hop to which the received packet is to be forwarded," as required by Applicants' independent Claim 1.

Therefore, even if the combination of Zhang and Nakabayashi is assumed to be proper, the cited passages of the combination fails to teach every element of Applicants' Claim 1. Moreover, independent Claim 6 recites features that are analogous to the features of independent Claim 1 as argued above, but is different in scope. Accordingly, Applicants respectfully traverse, and request reconsideration of this rejection based on these references.

Moreover, with respect to the rejection of Applicants' independent Claim 29 under 35 U.S.C. § 103(a), Applicants respectfully traverse the rejection, and request reconsideration thereof, as next discussed.

Briefly summarizing, Applicants' independent Claim 29 is directed to a packet transmission system that includes *inter alia*: a packet creating unit configured, ***if said one of the wireless base stations is a wireless base station that first received a packet from a terminal device***, to add address information of a wireless base station, to which the source

terminal device or the destination terminal device of the received packet currently belongs, to the received packet with reference to the location table. (Claim 29, portions omitted, emphasis added.) The pending Office Action contends that this feature is taught by Nakabayashi at paragraphs [0053] and [0096]. (Office Action, from p. 14, l. 18, p. 15, l. 3.) However, in these paragraphs, Nakabayashi explains that a routine 64 creates a media access frame (MAC frame) in which the MAC address indicated by the connected bridge ID 35 in the sub-table 30-i corresponding to the port number i that is stored in the RA address field 113 (step 647), transmits the created MAC frame to the MAC controller 13 (step 645), and ends the transmission processing. (Nakabayashi, ¶ [0096], Fig. 11.) Steps S647 and S645 are performed upon detection that a port number i matches one of the available wireless interface port numbers. (Nakabayashi, ¶ [0096], ll. 1-3, Fig. 11.) However, Applicants' independent Claim 29 requires that address information of a wireless base station is added to a received packet, in a case where one of the wireless base stations is ***a wireless base station that first received a packet from a terminal device***. This condition is entirely lacking in the disclosure of Nakabayashi.

Therefore, even if the combination of Zhang and Nakabayashi is assumed to be proper, the cited passages of the combination fails to teach every element of Applicants' Claim 29. Moreover, independent Claim 32 recites features that are analogous to the features of independent Claim 29 as argued above, but is different in scope. Accordingly, Applicants respectfully traverse, and request reconsideration of this rejection based on these references.

Consequently, in view of the present amendment, no further issues are believed to be outstanding in the present application, and the present application is believed to be in condition for formal Allowance. A Notice of Allowance for Claims 1, 5-6, 8-10, and 29-34 is earnestly solicited.

Should the Examiner deem that any further action is necessary to place this

application in even better form for allowance, the Examiner is encouraged to contact Applicants' undersigned representative at the below listed telephone number.

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